

TRADE SECRET PRICES AND HIGH-TECH DEVICES: HOW MEDICAL DEVICE MANUFACTURERS ARE SEEKING TO SUSTAIN PROFITS BY PROPERTIZING PRICES

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Introduction

The business practices of medical device manufacturers have come under increasing scrutiny over the last several years, following a spate of product recalls that precipitated hundreds of class action product liability lawsuits starting around 2004.² Compared to stories of prematurely failing defibrillator batteries and unwanted surgical explants of pacemakers containing faulty seals, the modest headline in the November 17, 2007 Business Section of *The New York Times* announcing the eleventh-hour settlement of a lawsuit between Boston Scientific (formerly the Guidant Corporation³) and the ECRI Institute promised nothing in the way of drama.⁴ Behind the ho-hum headline, however, is an important legal story about the quietly expanding scope of trade secrecy and the ways in which that expansion might contribute to the unsustainably rising cost of healthcare.

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² In April 2004, Medtronic issued a recall for two models of implantable cardioverter defibrillators (ICDs) whose batteries were taking too long to charge before delivering therapy. See http://www.fda.gov/oc/po/firmrecalls/medtronic04_04.html. In February 2005, Medtronic issued a physician notification that batteries were shorting out in several models of ICDs and cardiac resynchronization pacemakers (CRT-Ds). See http://www.fda.gov/oc/po/firmrecalls/medtronic02_05.html. In July 2005, Guidant Corporation voluntarily recalled nine pacemaker models that contained defective seals. See http://www.fda.gov/oc/po/firmrecalls/guidant07_05.html. In June 2006, Guidant announced that it would be retrieving multiple models of pacemakers, CRT-Ds, and ICDs from its sales force and hospital inventories, because they contained flawed capacitors. See http://www.fda.gov/oc/po/firmrecalls/bostonscientific06_06.html. Although it appeared that device manufacturers would be forced to devote considerable resources over the coming years to trying and settling these lawsuits, the industry was handed a decisive victory by the Supreme Court in February 2008. In *Riegel v. Medtronic*, 128 S.Ct. 999 (2008), the Court held that state law causes of action alleging injuries resulting from defective medical devices are categorically pre-empted by the 1976 Medical Device Amendments to the Federal Food, Drug, and Cosmetic Act.

³ Before the merger with Boston Scientific, Guidant Sales Corporation (“Guidant”) was a wholly owned subsidiary of Cardiac Pacemakers, Inc., which manufactured CRM devices sold by Guidant under the Guidant name.

⁴ See Barnaby J. Feder, *Boston Scientific and Consultant Settle a Lawsuit*, N.Y. TIMES, November 17, 2007, at <http://www.nytimes.com/2006/09/15/business/15device.html?scp=1&sq=guidant+&st=nyt>.

As Richard Epstein has noted, the law of trade secrets has taken a back seat to copyrights and patents in the explosion of scholarship on intellectual property issues in recent years.⁵ While scholars concerned for the future of the public domain have argued forcefully and persuasively against the continuing expansion of rights – both in scope and duration – for holders of copyrights and patents, they have said little about the corresponding “creep” that has been occurring in the law of trade secrets.⁶ The Guidant-ECRI settlement, which was concluded before a decision on the merits of Guidant’s novel claim that the prices it charges for cardiac rhythm management (“CRM”) devices can properly be considered trade secrets, is a prime example both of how this creep is occurring and how it may succeed, if not through the creation of legal precedent, then through the creation of a litigation-induced chilling effect on the sharing of information that is alleged, though never proven, to be a trade secret.

What is at stake for device manufacturers like Guidant in the legal transformation of individual device prices into intellectual property is the perpetuation by new means of an imperfectly competitive and highly profitable market for implantable devices that has historically been all but indifferent to price.⁷ What is at stake for hospitals, and indirectly for third-party

⁵ See Richard Epstein, *The Constitutional Protection of Trade Secrets under the Takings Clause*, 71 U. CHI. L. REV. 57, 57 (2004).

⁶ See, e.g., James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 LAW AND CONTEMPORARY PROBLEMS 33, 40 (2003) (“In the new vision of intellectual property, however, property should be extended everywhere—more is better. Expanding patentable and copyrightable subject matter, lengthening the copyright term, giving legal protection to “digital barbed wire” even if it is used in part to protect against fair use: Each of these can be understood as a vote of no-confidence in the productive powers of the commons.”). For an exception to this rule, see David S. Levine, *Secrecy and Unaccountability: Trade Secrets in our Public Infrastructure*, 59 FLA. L. REV. 135 (2007), which examines the recent and unprecedented intrusion of trade secrecy into aspects of government and public infrastructure, such as voting, where transparency has historically been taken for granted.

⁷ See Kurt Kruger, *The Medical Device Sector*, in THE BUSINESS OF HEALTHCARE INNOVATION 286 (Lawton R. Burns, ed., 2005) (“In contrast to the pharmaceutical sector, which is currently under heavy policy pressure over prices, the medical device sector is generally small enough to fly under the radar of politically activist groups and policy makers. Expenditures on devices are also buried in the figures for hospital costs, and thus are not easily discerned or tracked.”)

payers and patients, is the ability of buyers in the healthcare marketplace to bring basic comparative price information to bear in high-cost purchasing negotiations and decisions. The Guidant litigation thus demonstrates that whether device prices can be trade secrets as a matter of law is more than a doctrinal question about the proper scope of intellectual property rights; it is also a health care policy question, the answer to which may directly impact national health care spending over the coming decades. Through analysis of Guidant’s trade secret claims, the evolution of trade secret doctrine, the peculiar price dynamics of the market for CRM devices, and the implications of price secrecy for health policy, this article advances the argument that trade secret protection for medical device prices should be precluded as a matter of both trade secret law and health law.

A Tale of Two Lawsuits: Guidant Presses the Case for Secret Prices

The Guidant story is, in reality, a tale of two lawsuits – not just one. In both, Guidant, one of the three leading U.S. manufacturers of CRM devices, a category that includes implantable pacemakers, defibrillators, and cardiac resynchronization therapy devices (“CRT-Ds”)⁸, brought claims for misappropriation of trade secrets based on the disclosure of information relating to prices paid by hospitals for devices.⁹ Guidant brought the first lawsuit in Minnesota against Aspen Healthcare Metrics (“Aspen”), a health care consulting company that advises hospital clients on supply purchasing decisions by reviewing the clients’ contracts with

⁸ Pacemakers control heart rhythms that are either too slow (bradycardia) or too fast (tachycardia). Defibrillators deliver a shock to the heart to halt tachycardia or to stop irregular electrical activity known as fibrillation. CRT-Ds are used to treat congestive heart failure. See JEFFREY KIRK, MACHINES IN OUR HEARTS: THE CARDIAC PACEMAKER, THE IMPLANTABLE DEFIBRILLATOR, AND AMERICAN HEALTHCARE 8 (2001).

⁹ See *Cardiac Pacemakers, Inc. v. Aspen II Holding Co.*, 413 F. Supp. 2d 1016 (D. Minn. 2006); *Emergency Care Research Institute v. Guidant Corp.*, No. 06-1898, 2006 U.S. Dist. LEXIS 88416 (E.D. Pa. Dec. 5, 2006); *Emergency Care Research Institute v. Guidant Corp.*, No. 06-1898, 2007 U.S. Dist. LEXIS 67658 (E.D. Pa. Sept. 12, 2007).

vendors and comparing the pricing in those contracts with pricing obtained by other clients for the same or competing supplies.¹⁰ In its complaint against Aspen, Guidant “assert[ed] trade secret protection under the Minnesota Uniform Trade Secrets Act for three aspects of its pricing: (1) Guidant’s strategic pricing process; (2) Guidant’s contracts; and (3) each hospital’s price and contract terms.”¹¹ Guidant also expressly asserted, however, that it was *not* seeking protection for “discrete price points paid by a particular hospital; and . . . average sales prices of Guidant’s CRM devices across multiple hospitals.”¹²

The second suit was brought as a declaratory judgment action in Pennsylvania by Emergency Care Research Institute (“ECRI”), a non-profit research center that publishes a subscription-based online price benchmarking database for single-use medical supplies, including CRM devices.¹³ The suit was filed in response to demand letters in which Guidant claimed that ECRI was misappropriating Guidant’s trade secrets by publishing device prices submitted by hospitals to the database,¹⁴ which enables subscribers to compare their own prices for specific supplies with low and average prices paid both regionally and nationally by other subscribers for the same supplies.¹⁵ In its counterclaim against ECRI, Guidant made a more ambitious trade secrets claim than it had made against Aspen, asserting protection under the Pennsylvania Uniform Trade Secrets Act not only for its strategic pricing process and the compilation of price-related terms contained in hospital contract documents, terms which

¹⁰ See *Cardiac Pacemakers, Inc.*, 413 F. Supp. 2d at 1019-20.

¹¹ *Id.* at 1020.

¹² *Id.*

¹³ See *supra* note 9.

¹⁴ See *Emergency Care Research Institute*, 2007 U.S. Dist. LEXIS 67658, at *6-7.

¹⁵ Compl. of ECRI, ¶ 13.

generally include volume commitments and rebates linked to the realization of those commitments, but for the actual “prices paid by hospitals to Guidant for its CRM devices.”¹⁶ Whereas Guidant had expressly *not* claimed trade secret protection in the *Aspen* case for “discrete price points paid by a particular hospital,” it did make a claim for actual prices paid in its suit against ECRI.¹⁷ According to this more ambitious “prices paid” theory, Guidant acquires new intellectual property rights in business information every time it sells a CRM device to a hospital, probably thousands if not tens of thousands of times a year.

The aim of Guidant’s legal efforts has been to prevent device buyers – usually group purchasing organizations, health systems, or individual hospitals – from shopping device prices, which they have routinely done by sharing price-paid information among themselves, with hired healthcare consultants, or with subscription-based benchmarking services like ECRI’s, which exist to help hospitals hold down their supply costs.¹⁸ Many hospital administrators view the

¹⁶ Guidant’s First Amended Ans. & Counterclaims, ¶ 30.

¹⁷ The reason for the broader claim against ECRI may be that ECRI, unlike *Aspen*, did not make a practice of reviewing hospitals’ actual contracts with vendors and was therefore receiving from hospitals a much more limited quantum of information than *Aspen* was. See Emergency Care Research Institute, 2007 U.S. Dist. LEXIS 67658, at *6 (“When reviewing submission data from...subscribers, ECRI does not review the subscribers’ contracts with vendors such as Guidant.”); Cardiac Pacemakers, Inc., 413 F. Supp. 2d at 1020 (“Guidant maintains that *Aspen* is the only consulting firm that obtains Guidant’s CRM contracts...”).

¹⁸ See, e.g., Robert Keast, et al., *Shelf Price Agreements: A Novel Approach to Competitive Bidding for Arrhythmia Therapy Devices*, THE JOURNAL OF CARDIOVASCULAR MANAGEMENT, September/October 2004, at 13 (“The arrhythmia faculty also used broad, informal benchmarking to assess best prices achieved at other like institutions.”); Joseph Mantone, *Contracting Concerns*, MODERN HEALTHCARE, May 22, 2006, at 18 (observing that “[h]ospitals commonly share device prices with consultants or group purchasing organizations in an effort to determine whether they can lower their supply costs”); Eileen McGinnity, *Check the Fine Print: Are Your Medical Device Contracts Making It Hard to Price Shop?*, HFMA WANTS YOU TO KNOW (Hosp. Fin. Mgmt. Ass’n), June 14, 2006, at http://www.hfma.org/publications/know_newsletter/061406.htm?print=on (discussing the prevalence of price benchmarking in the CRM device market). It is also apparently not uncommon for hospitals to disclose device prices to third-party firms conducting surveys. For example, surveys of pacemaker prices by model and manufacturer have been conducted and the results published on multiple occasions in *HMM (Hospital Materials Management)*, a newsletter for materials managers and group purchasing organizations. See, e.g., *Pacemakers Get Fancier, Pricier*, HMM, August 2005, at 11-14.

The public availability of specific price information and the willingness of hospital employees to share it with third parties raise questions of fact about whether these prices are trade secrets within the meaning of the Uniform Trade Secrets Act, under which the success of efforts to protect secrecy is dispositive. See Unif. Trade

sharing of such price information as a necessary condition for cost containment in an economic environment of increasing device costs and stagnant Medicare reimbursements for implant procedures.¹⁹ Guidant, by contrast, views such sharing as a source of unfair leverage for buyers. As a company spokesman said, “We simply don’t want the price negotiated privately with one hospital under one set of circumstances used against us in negotiations with another hospital with an entirely different set of circumstances.”²⁰ Guidant’s desire to conceal the prices hospitals pay is thus motivated not by the traditional concern raised in trade secret cases, which is that competitors will acquire and use the information to their economic advantage, but by concern that customers will. This focus on secreting information from customers as opposed to competitors is a feature that makes the Guidant trade secrets litigation unique, if not unprecedented, among reported trade secrets cases. Guidant’s theory, if it is ultimately accepted by courts, could have profound implications not only for the health care market, including the market for pharmaceuticals, but for every market in which the prices paid for goods are subject to contractual negotiation between sellers and buyers.

Guidant’s bid to propertize CRM device prices as a means of preserving the firm’s negotiating leverage did not go unnoticed in the health care trade press, which reported on the litigation during its pendency with some alarm, quoting hospital administrators who worried publicly about the likely consequences of a Guidant victory for increasingly cost-conscious

Secrets Act § 1(4) (1985). Holding these factual questions in abeyance, this article considers trade secret protection for individual device prices as a matter of law and policy.

¹⁹ See Larry Burnett, R.N., *Rise in Heart Failure Means Increased Prices for CRMs*, MATERIALS MANAGEMENT IN HEALTHCARE, January 2007, at 42 (citing rising device costs and stagnant Medicare reimbursements as trends making it “imperative that hospitals look at internal and external services for cost and utilization benchmarking”).

²⁰ See Matthew Weinstock, *Accessing Prices*, HOSPITALS & HEALTH NETWORKS, June 2006, at 18 (quoting a portion of a written statement by Boston Scientific spokesman Paul Donovan).

hospitals.²¹ The irony of this collective fretting is that hospital administrators have arguably tied their own hands when it comes to sharing prices by assenting in large numbers to strict confidentiality provisions that, according to Guidant’s legal pleadings, cover the substance of *all* negotiated contract terms – taken both individually and collectively – including sales volume, product mix, and price.²² By agreeing to broadly drafted confidentiality provisions, hospitals have not only assumed a contractual duty to Guidant, they have strengthened Guidant’s case against third party consultants and benchmarking services that the individual prices paid for devices are subject to reasonable efforts to protect their secrecy and therefore eligible for statutory protection as trade secrets.²³ Thus can individual contract promises, enforceable only against the contracting parties, become a foundation for statutory rights that are enforceable against the world.

Both the Aspen and ECRI cases settled on undisclosed terms following the denial of cross-motions for summary judgment on Guidant’s trade secret claims. The court in the Aspen case held that “genuine issues of material fact remain as to whether Guidant’s pricing information was readily ascertainable, whether it provides an economic advantage, and whether

²¹ See, e.g., *id.* at 18 (stating that “no one really knows how these cases will impact business operations, but there is concern that manufacturers will...tighten reins on how much – and with whom – pricing information is shared”); Mantone, *supra* note 18, at 18 (“The lawsuits are drawing attention from hospital materials managers, who worry the outcomes could restrict hospitals from sharing supply prices with any third party, even affiliated ones.”); Eileen McGinnity, *supra* note 18, (discussing the prevalence and value of price benchmarking, and cautioning that secret pricing “could make it more and more difficult for your hospital – and the hospital industry as a whole – to gain control over rising medical device costs”).

²² See Matthew Weinstock, *supra* note 20, at 16 (“The Guidant contract stipulated that third parties were not allowed [to] see any contract information without prior written permission from the manufacturer.”); Eileen McGinnity, *supra* note 18, (“These confidentiality clauses vary by vendor but tend to include a range of restrictions, especially regarding the hospital’s ability to share contract terms such as pricing.”). As a factual matter, ECRI disputed Guidant’s claim that all hospitals that buy from Guidant have agreed in their contracts to confidentiality provisions. See Emergency Care Research Institute, 2007 U.S. Dist. LEXIS 67658, at *7.

²³ This is true inasmuch as the Uniform Trade Secrets Act (“UTSA”) requires proof by the owner of an alleged trade secret of reasonable efforts to protect secrecy. See Unif. Trade Secrets Act § 1(4) (1985). The relevant provisions of the UTSA are discussed at length below.

it is subject to reasonable measures of protection.”²⁴ The court in the ECRI case, which was presented with the more ambitious assertion of trade secret rights for actual prices paid, reached a similar conclusion.²⁵ With neither case having gone to a full trial on the merits, the current status under the Uniform Trade Secrets Act (“UTSA”) of actual prices paid by hospitals for medical devices remains murky, and entities that continue to engage in or facilitate the dissemination of such prices therefore remain exposed. The exposure may not be great for hospitals, inasmuch as device manufacturers are unlikely to bite the hands that feed them, but it is certainly more substantial for third party purveyors of purchasing advice and comparative price information – entities like Aspen and ECRI, which have made no contractual promises of confidentiality to manufacturers but which simply cannot know in the wake of the Guidant litigation whether they are, in effect, bound as a matter of trade secret law by the promises their hospital clients and subscribers have made. Under the common law of trade secrets, Guidant’s claim of protection for actual prices paid is demonstrably unfounded, but under the UTSA, which supposedly merely codified the basic principles of the common law,²⁶ Guidant’s claim is plausible. The following section explains why this is true and how it came to be that the drafters of the UTSA have expanded the potential reach of trade secrecy in ways both accidental and detrimental to price competition and market efficiency.

²⁴ *Cardiac Pacemakers, Inc.*, 413 F. Supp. 2d at 1028.

²⁵ The court held that “[t]he factual record at this stage of the case is unclear as to: (1) the extent of the confidentiality agreements [between Guidant and its hospital customers hospital]; (2) the extent to which Guidant’s prices are known in the healthcare industry; (3) the extent to which Guidant’s prices are readily ascertainable by proper means; and (4) the competitive value of the prices to Guidant.” *Emergency Care Research Institute*, 2007 U.S. Dist. LEXIS 67658, at *16.

²⁶ *See* Commissioners’ Comment to Unif. Trade Secrets Act §1, *in* BRIAN M. MALSBERGER, *TRADE SECRETS: A STATE-BY-STATE SURVEY* 3084 (3d ed. 2005) (stating that the purpose of the Act is to “codif[y] the basic principles of common law trade secret protection”).

From the Common Law to the UTSA:
Ephemeral Information and the Expanding Embrace of Trade Secrecy

The notion that trade secrets are a kind of property has been controversial among intellectual property scholars, who have rightly argued that property rights in information are both more problematic to define and more difficult to enforce than property rights in tangible things.²⁷ It has also been pointed out that the “relational focus of trade secret’s liability rules aligns trade secret law more closely with the law of contract than with the law of property.”²⁸ The characterization of trade secrets as property, however, has a pedigree in the U.S. common law that reaches all the way back to the first-decided case, which appears to be *Peabody v. Norfolk* (1868),²⁹ a Massachusetts case in which the executors of a mill owner’s estate successfully sued the mill’s former engineer for breaching a contract in which the engineer had agreed to hold “sacred” information relating to a secret process for manufacturing gunny cloth from jute butts.³⁰ As a matter of contract law, the court concluded that the engineer was “bound...never to disclose the secret confidentially imparted to him during the term of his actual service.”³¹ The court also grounded its decision in property law, invoking the rule from the English case of *Morison v. Moat* to hold that “[one] who invents or discovers, and keeps secret, a process of manufacture, whether proper for a patent or not, ... has a property in it, which a court

²⁷ See, e.g., Pamela Samuelson, *Information as Property: Do Ruckelshaus and Carpenter Signal a Changing Direction in Intellectual Property Law?*, 38 Cath. U. L. Rev. 365, 365-367 (1989).

²⁸ Robert G. Bone, *A New Look at Trade Secret Law: Doctrine in Search of Justification*, 86 CALIF. L. REV. 241, 244 (1998).

²⁹ 98 Mass. 452 (1868).

³⁰ *Id.* at 453.

³¹ *Id.* at 461.

of chancery will protect against one who in violation of contract and breach of confidence undertakes to apply it to his own use, or to disclose it to third persons.”³²

With *Peabody*, the English common law of trade secrets made its transatlantic crossing as an equitable rule governing the conduct of employees with respect to secret manufacturing processes developed by their employers and recognized by courts as a type of property. The rule from *Morison*, by way of *Peabody*, was subsequently adopted in many states, in a range of cases from around the turn of the twentieth century whose facts concerned secret manufacturing processes, designs, patterns, and formulae.³³ Also influential in the early U.S. common law cases was Justice Story’s *Commentaries on Equity Jurisprudence* (1835), according to which equity protects secrets, of whatever kind, communicated during the course of employment.³⁴ Justice Story divided such secrets into three categories: “secrets of trade or secrets of title, or any other secrets of the party important to [the employer’s] interests.”³⁵ Although neither the *Commentaries* nor the early reported decisions provide any specific definition of “secret of trade,” the great majority of the cases involved claims for secret manufacturing processes of one

³² *Id.* at 458. Like *Peabody*, *Morison* involved the disclosure and use of secret information relating to a manufacturing process, namely the process for compounding a non-patent medicine. *Id.* at 459.

³³ See, e.g., *Salomon v. Hertz*, 2 A. 379, 380 (N.J.Ch. 1886) (“secret and peculiar methods and processes for making Cordovan leather”); *Cincinnati Bell Foundry Co. v. Dodds* 1887 WL 469, 1 (Ohio Super. 1887) (“a secret process for the manufacture of bells”); *Tabor v. Hoffman*, 23 N.E. 12, 12-13 (N.Y.1889) (patterns for manufacturing moulds from which metal parts of a rotary pump were cast); *O. & W. Thum Co. v. Tloczynski*, 72 N.W. 140, 140 (Mich. 1897) (secret “processes and machinery” for manufacturing sticky fly paper); *C. F. Simmons Medicine Co. v. Simmons* 81 F. 163, 163 (E.D. Ark. 1897) (process for compounding “Simmons’ Liver Medicine”); *Westervelt v. Nat’l Paper & Supply Co.*, 57 N.E. 552 (Ind. 1900) (secret design for a machine for making paper bags); *Stewart v. Hook* 45 S.E. 369, 369 (Ga. 1903) (“secret formulas and receipts for the manufacture and compounding of medicines for the cure of the opium and morphine habit”); *Taylor Iron & Steel Co. v. Nichols*, 61 A. 946, 946 (N.J. Ch. 1905) (“process or formula” for making steel of superior quality); *Germo Mfg. Co. v. Combs* 240 S.W. 872, 873 (Mo.App. 1922) (secret formula for compounding “cholorine,” for “the treatment of diseases of fowls and as a tonic for hogs”).

³⁴ 2 Eq. Jur. § 952 (1870). This section from J. Story’s treatise is quoted, for example, in *Peabody*, 452 Mass. at 459, *Eastman Co. v. Reichenbach*, 20 N.Y.S. 110, 115 (Sup. Ct. 1892), and *Stevens & Co. v. Stiles*, 71 A. 802, 805 (R.I. 1909).

³⁵ 2 Eq. Jur. § 952. J. Story cites *Morison* in a footnote to this section.

kind or another.³⁶ In a minority of cases, protection was sought and granted for other types of secret business information, including books containing information about farmers' insurance policies;³⁷ a "secret code" for determining the sale price of goods sold from catalogs by traveling salesmen;³⁸ compilations of price quotations for stocks and commodities;³⁹ and names, addresses, and requirements of customers on a sales route.⁴⁰

By the 1920s, courts in several states⁴¹ had adopted the definition of trade secret from William Mack's *Cyclopedia of Law and Procedure* (1906):

A trade secret is a plan or process, tool, mechanism, or compound, known only to its owner and those of his employees to whom it is necessary to confide it. It is a property right which equity, in the exercise of its power to prevent a breach of trust, will protect. It differs from a patent in that as soon as the secret is discovered, either by an examination of the product or in any other honest way,

³⁶ See cases cited *supra* at note 32. See also, e.g., *Eastman Co.*, 20 N.Y.S. at 112 ("processes, appliances, substances, and methods" for manufacturing film and bromide paper); *Baldwin v. Von Micheroux* 25 N.Y.S. 857, 857 (Sup. Ct. 1893) ("a certain secret, but unpatented, process for manufacturing tobacco flavors"); *Fralich v. Despar*, 30 A. 521, 521 (Pa. 1894) ("secrets of manufacturing and stilling of different kinds of oils"); *National Tube Co. v. Eastern Tube Co.*, 1901 WL 893, *1 (Ohio Com. Pl. 1901) ("wooden patterns for castings of various parts of machinery used for the manufacture of tubes and pipes"); *Dr. Miles Medical Co. v. Jaynes Drug Co.* 149 F. 838, 839 (C.C.Mass. 1906) ("secret formulas for making proprietary medicines"); *Pomeroy Ink Co. v. Pomeroy*, 78 A. 698, 698 (N.J.Ch.1910) ("formulas and formula notes" for manufacturing inks, mucilage, and sealing wax); *Stuckes v. National Candy Co.*, 138 S.W. 352, 353 (Mo.App. 1911) ("formula, process and method" for manufacturing hard boiled candy); *American Stay Co. v. Delaney*, 97 N.E. 911, 911 (Mass. 1912) ("secret processes and formulas" for manufacturing leather welting); *Vulcan Detinning Co v. Assmann* , 173 N.Y.S. 334, 352 (N.Y.A.D. 1 Dept.1918) (process for de-tinning steel using chlorine).

³⁷ *Morrison v. Woodbury*, 10 Trademark Rep. 130 (Kan. 1919) (books containing information about customers' fire and tornado insurance policies, including rates, effective dates, and "other valuable information").

³⁸ *Simmons Hardware Co. v. Waibel* 47 N.W. 814, 814 (S.D. 1891) (a secret code of letters, figures, and characters showing the cost and selling price of [plaintiff's] goods in copies of its catalogue given to its traveling salesmen).

³⁹ *Board of Trade of City of Chicago v. Christie Grain & Stock Co.* 198 U.S. 236, 250 (1905) (stating that "the plaintiff's collection of quotations is entitled to the protection of the law. It stands like a trade secret."); *Chamber of Commerce v. Wells*, 111 N.W. 157, 158 (Minn. 1905) ("Such quotations are in the nature of trade secrets, and entitled to protection as property, precisely as other property rights are protected by the law.").

⁴⁰ *Dairy Dale Co. v. Azevedo*, 295 P. 10, 10 (Cal. 1931).

⁴¹ See, e.g., *Victor Chemical Works v. Iliff*, 132 N.E. 806, 811 (Ill.1921); *Cameron Mach. Co. v. Samuel M. Langston Co.*, 115 A. 212, 214 (N.J.Ch.1921); *Stevens-Davis Co. v. Mather & Co.* 1923 WL 3289, 10 (Ill.App. 1 Dist. 1923); *Case v. Thomas* 1927 WL 2583, 1 (Ohio App. 6 Dist. Lucas Co. 1927); *American Cleaners and Dyers v. Foreman* 1929 WL 3169, 5 (Ill.App. 1 Dist. 1929).

the discoverer has the full right to use it. A process commonly known to the trade is not a trade secret and will not be protected by injunction.⁴²

Among the courts adopting the *Cyclopedia's* definition was the Court of Appeals of Kentucky, which declined in the seminal case of *Progress Laundry Co. v. Hamilton*⁴³ to extend trade secret protection to a list of customers on a sales route. Denying the injunctive relief requested by the plaintiff, the defendant's former employer, the court held that a list of customers from memory is not the type of information that qualifies as a trade secret.⁴⁴ As far as the court was concerned, the limited scope of the *Cyclopedia* definition was "sufficiently broad to cover and protect all applied methods, formulas, and processes in which a proprietary interest may be acquired in connection with the manufacturing, and even marketing, the product handled and disposed of by the employer."⁴⁵ The court saw no justification for protecting as property information "which is common and is essential and necessary to the prosecution of any business" and which was not "the product of any kind of special ingenuity."⁴⁶

As in some of the early cases involving customer lists, claims of trade secret protection for information not readily classifiable as a method, formula, or process and not the product of any "special ingenuity" were regarded with skepticism by courts, which sought to distinguish trade secrets from ordinary, albeit private, business information. In a case from 1910, for example, a corporate litigant attempted unsuccessfully to resist a subpoena for its books and

⁴² 22 Cyc. § 842 (1906).

⁴³ 270 S.W. 834 (Ky. App. 1925).

⁴⁴ *Id.* at 835. Trade secret protection for customer lists came to be recognized in a minority of jurisdictions in the years after *Progress Laundry* was decided. *See, e.g., Dairy Dale Co.*, 295 P. 10; *see also Notes on Recent Cases*, 15 Geo. L. J. 469 (1926-1927) ("Do lists of customers constitute trade secrets or confidential communications? The general rule is that they do not..."). The First Restatement of Torts includes lists of customers among its examples of trade secrets. *See* Restatement (First) of Torts § 757 cmt. b.

⁴⁵ *Id.*

⁴⁶ *Id.*

records on the grounds that they were protected as trade secrets.⁴⁷ The court held that “[t]he term ‘trade secret’ as it is usually understood means a secret formula or process, not patented, known only to certain individuals who use it in compounding or manufacturing some article of trade having a commercial value. It is rarely, if ever, used to denote the mere privacy with which an ordinary commercial business is carried on.”⁴⁸

The impulse to limit the scope of trade secrecy by denying protection for ordinary, private commercial information is memorialized in the First Restatement of Torts, in which the treatment of trade secrets is separated from that of non-trade secret confidential business information. Trade secrets are discussed in Section 757; confidential business information in Section 759. Notwithstanding the caveat that “[a]n exact definition of trade secret is not possible,”⁴⁹ Section 757 of the First Restatement defines a trade secret in a fairly circumscribed way as “any formula, pattern, device or compilation of information which is used in one’s business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it.”⁵⁰ In addition to this affirmative definition and a list of factors⁵¹ to be

⁴⁷ *In re Bolster*, 110 P. 547 (Wash.1910).

⁴⁸ *Id.* at 548. This distinction has been upheld in more recently decided cases involving assertions of trade secrecy in the context of discovery disputes during patent litigation. *See, e.g.*, *Tailored Lighting, Inc. v. Osram Sylvania Products, Inc.*, 236 F.R.D. 146, 148 (W.D.N.Y. 2006) (“Recognizing the sensitive nature of proprietary technical information, courts generally afford more protection to it than to ordinary business information.”); *Uniroyal Chemical Co. Inc. v. Syngenta Crop Protection*, 224 F.R.D. 53, 57 (D. Conn. 2004) (same); *Safe Flight Instrument Corp. v. Sundstrand Data Control Inc.*, 682 F.Supp. 20, 22 (D. Del. 1988) (same).

⁴⁹ *See also Den-Tal-Ez, Inc. v. Siemens Capital Corp.*, 566 A.2d 1214, 1228 (Pa. Super. Ct. 1989) (“As this general definition indicates, the concept of a trade secret is somewhat nebulous.”); *Kornylak Corp. v. Alpha Technical Services, Inc.*, No. CA85-03-018, 1986 WL 2178, at *3 (Ohio App. Feb. 18, 1986) (acknowledging that “the concept of a trade secret is at best a nebulous one”); *Abbott Laboratories v. Norse Chemical Corp.*, 147 N.W.2d 529, 533 (Wis. 1967) (“By its very nature, the trade secrecy doctrine, under the heading of unfair competition, deals with an area that is nebulous at to the guidelines to be applied.”); *Sarkes Tarzian, Inc. v. Audio Devices, Inc.*, 166 F.Supp. 250, 258 (C.D. Cal. 1958) (“What is a trade secret is difficult to define.”).

⁵⁰ RESTATEMENT (FIRST) OF TORTS § 757, cmt. b (1939).

⁵¹ The factors are (1) the extent to which the information is known outside the plaintiff’s business; (2) the extent to which it is known by employees and others involved in the plaintiff’s business; (3) the extent of measures taken by

weighed by courts in determining whether information qualifies for trade secret protection, Section 757 provides a negative definition of trade secret, by means of which trade secret information is differentiated from other types of confidential business information:

It differs from other secret information in a business in that it is *not simply information as to single or ephemeral events in the conduct of the business*, as, for example the amount or other terms of a secret bid for a contract or the salary of certain employees, or the security investments made or contemplated, or the date fixed for the announcement of a new policy or for bringing out a new model or the like. *A trade secret is a process or device for continuous use in the operation of the business.*⁵²

Although the complementary attributes of non-ephemerality and continuous use are not explicitly prescribed in the early common law decisions, they inhere in the quite narrow (i.e., formula-method-or-process) definitions of trade secrecy that had been adopted by courts across the country at the time the First Restatement was published. A trade secret within the meaning of these definitions is not just any kind of information that a business values and treats confidentially; it must be durable information on which the business runs. This requirement has sometimes been overlooked by courts and commentators,⁵³ but it represents a very important check on the self-serving tendency of business entities to hoard valuable information – a tendency the indulgence of which could substantially inhibit socially desirable, fair competition. Insisting upon a distinction between trade secret information and private-but-ordinary business information, as did the authors of the First Restatement and many courts before them, is an effective means of mitigating a significant social cost of recognizing property interests in

the plaintiff to guard the secrecy of the information, (4) the value of the information to the plaintiff and his or her competitors; (5) the amount of effort or money expended by the plaintiff to develop the information; and (6) the ease or difficulty with which the information could be properly acquired or duplicated by others. *Id.*

⁵²RESTATEMENT (FIRST) OF TORTS § 757, cmt. b. (emphasis added)

⁵³ See Bone, *supra* note 28, at 249-50.

information, which is the potential for the obstruction of fair competition through information hoarding.

Until the promulgation of the UTSA in the early 1970s and its eventual adoption in most states,⁵⁴ the First Restatement was the sole authority to which most courts looked to define the scope of trade secret protection and the elements of the cause of action for wrongful disclosure.⁵⁵ Whereas the First Restatement incorporates substantive limits on protectable subject matter—limits that are conceptually distinct from factual considerations concerning the competitive value and relative secrecy of the information sought to be protected—the UTSA does not. Under the UTSA, trade secret “means information, including a formula, pattern, compilation, program, device, method, technique or process” that derives independent economic value from not being generally known and that is the subject of reasonable efforts to maintain its secrecy.⁵⁶ “There is,” as one court has said, “virtually no category of information that cannot, as long as the information is protected from disclosure to the public, constitute a trade secret” within the meaning of the UTSA.⁵⁷ It is to this more open definition of trade secrets, not limited by the First Restatement’s requirements of continuous use and non-ephemerality, that proponents of secret prices appeal. And while it is a convenient truth for them that the UTSA does not incorporate the Restatement’s requirement of continuous use, the story of how the UTSA came *not* to include the requirement has nothing to do with sales price information, nor does it reflect

⁵⁴ See MILGRIM ON TRADE SECRETS § 1.01 (listing 43 states as having adopted the UTSA as of 2002). As of 2008, only four states, Massachusetts, New Jersey, New York, and Texas, have not enacted some form of the UTSA.

⁵⁵ *Id.* (characterizing the Restatement’s as the only uniformly-recognized definition of trade secrecy prior to the wide adoption of the UTSA); see also Bone, *supra* note 52, at 247 (acknowledging the wide influence of the Restatement’s formulation).

⁵⁶ Unif. Trade Secrets Act § 1.

⁵⁷ *US West Communications, Inc. v. Office of Consumer Advocate*, 498 N.W.2d 711, 714 (Iowa 1993) (quoting T.J. Collin, *Determining Whether Information Is a Trade Secret Under Ohio Law*, 19 U. Tol. L. Rev. 543, 545 (1988)).

any intention on the part of the uniform statute's drafters to expand the definition of trade secrecy to include ephemeral information like sales prices.

That the UTSA can be read to embrace transaction-specific price information is in actuality an unintended consequence of the drafters' decision to dispense with present continuous use as a necessary condition for trade secrecy. The Commissioners explained their departure from Section 757's requirement of continuous use only in narrow terms of the reasonableness of opening up the definition of trade secrecy to "extend[] protection to a plaintiff who has not yet had an opportunity or acquired the means to put a trade secret to use."⁵⁸ The change was also intended, according to the Commissioners, to bring within the scope of protection "information that has commercial value from a negative viewpoint, for example the results of lengthy and expensive research which proves that a certain process will *not* work."⁵⁹ Neither of these purposes – to protect useful information not yet being used and to protect useless information whose ultimate lack of value was expensive to discover – embraces transaction-specific sales price information. In removing the requirement of continuous use, the UTSA's drafters intended to bring within the scope of trade secrecy a very limited category of information that was not previously covered: information that has, or appeared at one time to have, the potential for continuous use in the operation of the business. Understood in light of the Commissioners' Comments, the elimination of the requirement of continuous use was not intended to bring ephemeral information within the scope of trade secrecy or to provide legal cover for efforts by sellers to gain the upper hand in price negotiations by cloaking quotidian sales prices in the mantle of intellectual property.

⁵⁸Commissioners' Comment to UTSA §1, in MALSBERGER, *supra* note 26, at 3084.

⁵⁹ *Id.* (emphasis in original).

The uniform statute's drafting history has fallen by the wayside, however, as individual states have enacted their own versions of the UTSA. Colorado courts, for example, have interpreted the omission to allow trade secret protection under the Colorado UTSA for a bid on a contract⁶⁰ – a type of information specifically identified in the First Restatement as falling outside the limits of protection.⁶¹ Adopting a plain meaning interpretation of the Colorado UTSA, the court rejected a defendant's argument, presumably premised on the Restatement, that a bid could not be a trade secret as a matter of law because it was not continuously used in the plaintiff's business. The court declined to “read a continuous use requirement into this statute when it does not contain such language nor any legislative intent to include this concept.”⁶² Tennessee, for its part, has modified the UTSA's definition of trade secret to expressly include “financial data” within its scope. This category may well encompass sales prices, although the question has apparently not yet been decided by any Tennessee court. Although the drafters of the UTSA did not mean to bring ephemeral business information within the scope of trade secrecy when they eliminated the requirement of continuous use from the statutory definition, such has been the unintended consequence of the modification, at least in some jurisdictions that have adopted the UTSA.

Even after the adoption of the UTSA in most states, however, the First Restatement's definition continues to be cited and relied on by courts that are presented with the task of

⁶⁰ See *Ovation Plumbing, Inc. v. Furton*, 33 P.3d 1221, 1224 (Colo. App. 2001).

⁶¹ See RESTATEMENT (FIRST) OF TORTS § 757 cmt b. (stating that a trade secret is “not simply information as to single or ephemeral events in the conduct of the business, as, for example, the amount or other terms of a secret bid for a contract”)

⁶² *Id.*

delimiting the scope of trade secret protection.⁶³ The tenacity of the definition from Section 757 is remarkable considering the near-antiquity of the First Restatement, the statutory pre-emption in most states of any common law cause of action for trade secret misappropriation, and the ostensibly superseding treatment of trade secret doctrine in the more recent (but seldom cited) Third Restatement of Unfair Competition.⁶⁴ What the continuing vitality of Section 757 suggests is that the UTSA has defined the scope of trade secrecy so amorphously on its face that it has not provided courts with an adequate analytical framework for deciding what is or is not a trade secret. Seeking clearer parameters than the laconic statute provides, courts have fallen back on the detailed guidance in Section 757. This interpretive pathway through the UTSA by means of the First Restatement is not inconsistent with the stated purpose of the UTSA's

⁶³See, e.g., *Amerisource Bergen Drug Corp. v. American Associated Druggists, Inc.*, No. 05-5927, 2008 WL 248933, at *18-19 (E.D. Pa., Jan. 29, 2008) (applying the UTSA but citing Restatement § 757 “sub-factors” for determining trade secret status); *Learning Curve Toys, Inc. v. PlayWood Toys, Inc.*, 342 F.3d 714, 722 (7th Cir. 2003) (stating that “[a]lthough the Act explicitly defines a trade secret..., Illinois courts frequently refer to six common law factors (which are derived from § 757 of the Restatement (First) of Torts) in determining whether a trade secret exists”); *Enterprise Leasing Co. v. Ehmke*, 3 P.3d 1064, 1069 n.6 (Ariz. 2000) (invoking the Restatement factors for “additional guidance” even though they are not required by the UTSA); *Amoco Prod. Co. v. Laird*, 622 N.E.2d 912, 918 (Ind. 1993) (stating that, post-UTSA, “courts have invoked the common law predecessor to the UTSA, The Restatement of Torts, § 757 (1939), to assist in the definitional task”); *Minuteman, Inc. v. Alexander*, 434 N.W.2d 773, 778 (Wis. 1989) (holding that “although all six elements of the Restatement's test are no longer required, the Restatement requirements still provide helpful guidance in deciding whether certain materials are trade secrets under our new definition”).

⁶⁴ Whereas the UTSA and Section 757 are often read together by courts as complementary sources of definitional authority, the sections of the Restatement (Third) of Unfair Competition (1995) that deal with trade secrets are seldom invoked. According to Milgrim's treatise, as of 2006 only one court in a non-UTSA jurisdiction had actually relied on the Restatement (Third) of Unfair Competition to decide a trade secret claim. See MILGRIM ON TRADE SECRETS § 1.01 (citing *Briefing.com v. Jones*, 126 P.3d 928, 931-932 (Wyo. 2006), which describes the principles of the Restatement (Third) of Unfair Competition as having supplanted Section 757). Wyoming adopted the UTSA in 2006. See Wyo. Stat. Ann. § 40-24-101 ff. (2007). Texas, which has still not adopted the UTSA, has case law citing the Restatement (Third) of Unfair Competition with approval. See *In re Bass*, 113 S.W.3d 735, 740 (Tex. 2003) (“In determining which position is correct, we begin by noting again that the Restatement (Third) of Unfair Competition regards the test as relevant but not dispositive, as “[it] is not possible to state precise criteria for determining the existence of a trade secret.”). Although it is true that cases citing the Restatement (Third) of Unfair Competition for a definition of trade secret are rare, there are a few. See, e.g., *Cemen Tech, Inc. v. Three D Indus., L.L.C.*, No. 96 /03-1869, 2008 Iowa Sup. LEXIS 63, at *9-10 (Iowa, May 2, 2008) (relying on the Restatement (Third) of Unfair Competition as “consistent with” the UTSA and Iowa code); *Cognis Corp. v. Chemcentral Corp.*, 430 F. Supp. 2d 806, 812 (D. Ill. 2006) (stating that the Restatement (Third) of Unfair Competition is “often relied on by the Seventh Circuit in analyzing trade secret claims”); *Amvac Chem. Corp. v. Termilind, Ltd.*, No. 96-1580-HA, 1999 U.S. Dist. LEXIS 20151, at *23 (D. Or. Aug. 3, 1999) (reading the Oregon UTSA in light of Restatement (Third) of Unfair Competition § 39).

drafters, which was to codify and not to revolutionize the existing common law of trade secrets.⁶⁵ As an example, one federal court deciding a claim under the Pennsylvania UTSA recently elected simply to stand on the definition from Section 757. Explaining the choice, the court said “there is no indication that the statute effected a substantive shift in the definition of ‘trade secret’ – a conclusion “supported by post-P[U]TSA cases that rely on common law in determining whether certain information rises to the level of a trade secret.”⁶⁶

The First Restatement does not preclude the possibility that information relating to the sale of goods can be a trade secret, but the examples of trade secret sales-related information offered in Section 757 – “a code for determining discounts, rebates or other concessions in a price list or catalogue, or a list of specialized customers, or a method of bookkeeping or other office management” – all satisfy the complementary criteria of non-ephemerality and continuous use. Although transaction-specific sales information in the form of the price paid for a product could result from the *application* of a trade secret discount or rebate code, under the logic of Section 757 such information cannot be considered a trade secret in its own right, because it relates to a single, ephemeral commercial event. Applying this principle to Guidant’s claims of price secrecy, the claim in the Aspen case for protection of Guidant’s strategic pricing process is supported by Section 757, whereas the claim in the ECRI case for protection of actual prices paid is not. Actual prices paid fall under the rubric of “ordinary business information” that does not warrant trade secret protection. The First Restatement’s differentiation of protected price-generative information from unprotected price-paid information is captured linguistically in a wide range of legal decisions that assert the protected status of durable price-related information,

⁶⁵ Commissioners’ Comment to UTSA §1, in MALSBERGER, *supra* note 26, at 3084.

⁶⁶ Brett Senior & Assoc., P.C. v. Fitzgerald, No. 06-1412, 2007 WL 2043377, at *6 n.10 (E.D. Pa. July 13, 2007).

such as a pricing “architecture,”⁶⁷ “model,”⁶⁸ “strategy,”⁶⁹ “formula,”⁷⁰ or “mechanism.”⁷¹ It is elided, however, by nonspecific references in other legal decisions, quite often in dicta, to the protected status of “pricing information,”⁷² “pricing data,”⁷³ or “price data and figures.”⁷⁴ Each of these vaguely defined categories could presumably include prices paid.

By distinguishing between trade secret information and confidential business information of a non-trade secret nature, the First Restatement describes a doctrinal framework that expressly excludes ordinary, ephemeral business information from the scope of trade secrecy. This fact was recognized by the Ninth Circuit in *Clark v. Bunker*, a case in which the court singled out ephemeral information as the *only* category of information excluded from trade secret protection because of its “inherent qualities.”⁷⁵ In several other post-Restatement common law cases, the requirement of continuous use has similarly been invoked to exclude ephemeral information from the otherwise roomy embrace of trade secrecy. In *Cal Francisco Investment Corp. v.*

⁶⁷ *PepsiCo, Inc. v. Redmond*, No. 94 C 6838, 1996 WL 3965, at *10 (N.D. Ill. Jan. 2, 1996).

⁶⁸ *Nicor Energy v. Dillon*, No. 03 C 1169, 2003 U.S. Dist. LEXIS 13179, at *10 (N.D. Ill. July 23, 2003).

⁶⁹ *AK Steel Corp. v. Colton*, No. 01-74279, 2001 U.S. Dist. LEXIS 20314, at *10 (E.D. Mich. Nov. 30, 2001).

⁷⁰ *Drouillard v. Keister Williams Newspaper Services, Inc.*, 423 S.E.2d 324, 327 (N.C. Ct. App. 1992).

⁷¹ *Fisher Bioservices, Inc. v. Bilcare, Inc.*, No. 06-567, 2006 U.S. Dist. LEXIS 34841, at *50 (E.D. Pa. May 31, 2006).

⁷² *Optic Graphics, Inc. v. Agee*, 591 A.2d 578, 586 (Md. Ct. Spec. App. 1991); *Abbott-Interfast Corp. v. Harkabus*, 619 N.E.2d 1337, 1344 (Ill. App. Ct. 1993).

⁷³ *Volume Shoe Corp. v. Jolosky*, 772 P.2d 287, 287 (Kan. Ct. App. 1989).

⁷⁴ *Interbake Foods, L.L.C. v. Tomasiello*, No. C06-4089-MWB, 2006 U.S. Dist. LEXIS 82774, at *54 (N.D. Iowa Nov. 13, 2006) (citing *US West Communications, Inc. v. Office of Consumer Advocate*, 498 N.W.2d 711, 714 (Iowa 1993)).

⁷⁵ *Clark v. Bunker*, 453 F.2d 1006, 1009 (9th Cir. 1972) (applying California common law). Applying Section 757, the court upheld protection for “all of the forms, information, and techniques for formulating, promoting, financing, and selling contracts for ‘prepaid’ funeral services,” because they were “in the continuous operation of a mortician’s business.” *Id.*

Vrionis,⁷⁶ the court acknowledged that although “the nature of a trade secret is somewhat nebulous, a characteristic common to those secrets which have found protection from disclosure and use by the courts is the need for their continued use.”⁷⁷ The court concluded that individual real estate listings were ephemeral in nature and were not necessary for the continued operation of the plaintiff-broker’s business: “[A]s in the sale of products each sale of real estate is a distinct transaction.”⁷⁸

The rule has also been applied to deny trade secret protection for ephemeral information relating to business investments. The Second Circuit held in *Lehman v. Dow Jones & Co., Inc.*⁷⁹ that the process by which the plaintiff zeroed in on a particular corporate takeover target could be protected as a trade secret, because “[i]nformation like this would be used in *running* the business,”⁸⁰ but the identity of a specific target at a particular time could not. A comparable result was reached in *Bear, Stearns Funding, Inc. v. Interface Group*,⁸¹ in which a New York court held that the financial information of a corporate borrower whose loan was being offered for securitization was not a trade secret because it “relates only to an ephemeral (in this case, nonrecurring) event in the conduct of [the company’s] business.”⁸²

⁷⁶ 92 Cal. Rptr. 201 (Cal. App. 1971).

⁷⁷ *Id.* at 204.

⁷⁸ *Id.* at 205.

⁷⁹ *Lehman v. Dow Jones & Co., Inc.*, 783 F.2d 285 (2d Cir. 1986) (applying New York common law).

⁸⁰ *Id.* at 298 (emphasis in original).

⁸¹ 361 F. Supp. 2d 283 (S.D.N.Y. 2005).

⁸² *Id.* at 305. *See also* *EarthWeb, Inc. v. Schlack*, 71 F. Supp. 2d 299, 315 (S.D.N.Y. 1999) (holding that an employee’s knowledge of his employer’s future acquisition plans “while confidential, is generally not considered a trade secret”); *Emtec, Inc. v. Condor Tech. Solutions, Inc.*, No. 97-6652, 1998 U.S. Dist. LEXIS 18846, at *21 (E.D. Pa. Nov. 30, 1998) (holding that the identity of two corporate takeover targets “is not the type of information meant to be protected as a trade secret” because “this is not information that will be routinely used in Plaintiff’s business”).

In the commercial sales context, courts deciding common law trade secrets claims, most of which involved the enforcement of non-competes,⁸³ have declined to extend trade secret protection to price information – understood broadly as both compilations of wholesale prices and prices charged to individual customers – on the ground that, even if adequate efforts were undertaken to maintain the secrecy of such information, prices fluctuate over time in any industry and are therefore not the type of information eligible for trade secret protection.⁸⁴ In keeping with this logic, an employer’s stale price proposals have been held *not* to be protected from disclosure by a former employee, even though the methods for arriving at the proposals are.⁸⁵

A few courts in UTSA jurisdictions have echoed this reasoning, despite the fact that the UTSA, unlike the First Restatement, does not expressly exclude ephemeral information from the scope of trade secrecy. For example, the Maryland Court of Appeals has held that pricing information for a printing company’s largest customer was not a trade secret, because such

⁸³ Trade secret disputes involving allegedly secret sales information, including compilations of wholesale prices and customer-specific information on product prices and sales volumes, typically arise when an employer seeks to enforce a non-compete or a confidentiality agreement against a former employee, usually a sales representative, who has left the plaintiff’s employ to work for a competitor. *See, e.g.*, *Silipos, Inc. v. Bickel*, No. 06-02205, 2006 U.S. Dist. LEXIS 54946 (S.D.N.Y. August 8, 2006) (defendant had been plaintiff’s executive vice president); *Marietta Corp. v. Fairhurst*, 301 A.2d 734 (N.Y. App. Div. 2003) (defendant had been plaintiff’s vice president for sales); *Ivy Mar Co. v. C.R. Seasons Ltd.*, 907 F. Supp. 547 (E.D.N.Y. 1995) (defendants had been plaintiff’s sales representatives); *Economation, Inc. v. Automated Conveyor Sys, Inc.*, 694 F. Supp. 553 (S.D. Ind. 1988) (same); *Means Svcs., Inc. v. Rental Uniform Svcs. of Normal-Bloomington, Inc.*, 639 F. Supp. 208 (C.D. Ill. 1986) (same); *Hayden’s Sport Center, Inc. v. Johnson*, 441 N.E.2d 927 (Ill. App. 1982) (same).

⁸⁴ *See Ivy Mar Co. v. C.R. Seasons Ltd.*, 907 F. Supp. 547, 558 (E.D.N.Y. 1995) (“Price decisions are made on current competitive information which fluctuates over time in any industry...Accordingly, that information is not likely to be accorded trade secret status.”); *Hayden’s Sport Center, Inc. v. Johnson*, 441 N.E.2d 927, 931 (Ill. App. 1982) (holding that a book containing, *inter alia*, prices charged to customers is not a trade secret, because “prices change quickly”). *But see Cemen Tech, Inc.*, 2008 Iowa Sup. LEXIS 63, at *20 (stating that “neither Iowa Code section 550.2(4) nor section 1(4) of the Uniform Trade Secrets Act include any requirement relating to the duration of the information’s economic value”(internal citation omitted); *Nu-chem Laboratories, Inc. v. Dynamic Laboratories, Inc.*, No. 96-CV-5886, 2001 WL 35981560 (E.D.N.Y. March 30, 2001) (slip op.) (holding that prices paid by customers and printed on itemized invoices are trade secrets).

⁸⁵ *Johnson Controls, Inc. v. A.P.T. Critical Systems, Inc.*, 323 F. Supp. 2d 525, 537-538 (S.D.N.Y. 2004).

information was “subject to change” and “subject to the market.”⁸⁶ And the Ohio Court of Appeals rejected an employer’s claim of trade secrecy for projected sales and costs, because such information became obsolete once actual sales figures were obtained.⁸⁷ The Ohio court pointed out that by the time of the injunction hearing in the case, the purported trade secret sales information was already outdated.⁸⁸ Although neither court made reference to the Restatement’s *per se* exclusion of ephemeral information, both applied the Restatement factors in reaching their decisions, and both rested their decisions on the non-durability of the price information at issue.

Another reason why courts, applying both the common law and the UTSA, have held that prices for goods are not eligible for trade secret protection is that prices are necessarily disclosed to every paying customer and are therefore manifestly readily ascertainable (*i.e.*, not secret).⁸⁹ Courts in Illinois, following those in Pennsylvania, recognize that although “a unique formula used to calculate the price information which is not disclosed to a business’s customers” can be a trade secret, “price information which is disclosed by a business to any of its customers” cannot.⁹⁰ Although these courts do not take the position that prices are precluded by their

⁸⁶ *Optic Graphics, Inc. v. Agee*, 591 A.2d at 586.

⁸⁷ *Jacono v. Invacare Corp., No.*, 86605, 2006 Ohio App. LEXIS 1501, at *15 (Ohio App. March 30, 2006).

⁸⁸ *Id.*

⁸⁹ See *Brett Senior & Assoc.*, 2007 WL 2043377, at *7 (“The price charged was also available from the clients themselves. Several courts have recognized that prices charged are not protectible because they can be obtained by the customer.”); *Degussa Admixtures, Inc. v. Burnett*, No. 1:05-CV-705, 2007 U.S. Dist. LEXIS 6481, at *21-22 (W.D. Mich. Jan. 29, 2007) (finding that “prices are substantially available in the public domain, as customers frequently reveal what they are paying to the competition”); *Western Water Management, Inc. v. Brown*, No. CA 3-88-1936-G, 1989 U.S. Dist. LEXIS 12321, at *8 (N.D. Tex. Jan. 30, 1989) (“Customer and price information known to the industry, or which is readily ascertainable, or which has been disclosed to customers, is not a trade secret.”); *Economation*, 694 F. Supp. at 556 (stating that “once a customer has allegedly confidential information, the seller’s competitor can obtain the relevant information from the customer”); *Applied Industrial Materials Corp. v. Brantjes*, 891 F. Supp. 432, 437-38 (applying the Illinois Trade Secrets Act and stating that “the Illinois appellate courts which have addressed the issue have consistently held that price information which is disclosed by a business to any of its customers...does not constitute trade secret information protected by the Act”).

⁹⁰ *Applied Industrial Materials*, 891 F. Supp. at 437-38 (citing *SI Handling Sys. v. Heisley*, 753 F.2d 1244, 1260 (3d Cir. 1985), a case in which the Third Circuit, applying the Pennsylvania common law of trade secrets, distinguished

intrinsic ephemerality from being regarded as trade secrets, they treat the disclosure of a price to a customer in the course of a sales transaction as an essentially public disclosure that is fundamentally inimical to secrecy. This is true in part because such disclosures often do not end with the customer; once disclosed to the customer by the seller, the price is likely to be disclosed again by the customer to the seller's competitor, as the customer seeks to negotiate the most favorable deal he or she can for the goods he or she wants.⁹¹ This series of disclosures is what enables price competition and efficient, informed determinations of market price.

A feature apparently common to the cases involving the destruction of secrecy through the disclosure of prices to customers, however, is the absence of any express promise of confidentiality between the seller and the buyer that would prohibit the buyer from disclosing prices.⁹² Such promises, increasingly common in relationships between medical device manufacturers and hospitals, were at the center of Guidant's claims for trade secret device

between prices (not protected) and formulae used in pricing (protected)). *See also* PepsiCo, 1996 WL 3965, at *12 (applying the Illinois Trade Secrets Act and distinguishing between “the specific prices that PCNA charges to individual customers” (not protected) and “the entire pricing plan outlined in [PCNA's] Pricing Architecture” (protected)); Amerisourcebergen, 2008 WL 248933, at *24 (applying the Pennsylvania Uniform Trade Secrets Act and noting that “[s]everal courts have recognized that prices charged are not protectable because they can be obtained by the customer”); Brett Senior & Assoc., 2007 WL 2043377, at *7 (same); Den-Tal-Ez, 566 A.2d at 1230 (citing SI Handling for the proposition that “prices, i.e., the numbers themselves, may not be secret”).

⁹¹ *See, e.g.*, Degussa, 2007 U.S. Dist. LEXIS 6481, at *21 n.4 (finding that customers were not precluded from disclosing...prices to competitors and...frequently did so”); Econovation, 694 F. Supp. at 556 (“The courts have determined that the information is readily ascertainable because once a customer has allegedly confidential information, the seller's competitor can obtain the relevant information from the customer.”); Apollo Stationery Co., Inc. v. Pilmar, 173 N.Y.S.2d 854, 857 (N.Y. 1958) (pointing out that the “mere offer” by the plaintiff's former salesman to undercut the plaintiff's prices “could have elicited from the customers themselves all of the [allegedly secret price] information contained in the [allegedly misappropriated index] cards”).

⁹² As an example, the Illinois court in *Unisource Worldwide, Inc. v. Carrara*, 244 F. Supp. 2d 977, 987 (C.D. Ill. 2003), pointed out that “Unisource did not require its customers to sign any confidentiality agreements or otherwise restrict the customers' freedom to disclose [ultimate price] information.” In *Amerisourcebergen*, 2008 WL 248933, at *22, an employee of the plaintiff testified that “the cost of goods is the customer's. You know, if they choose to share that, I-I can't prohibit them from doing that, as far as I know.”

prices.⁹³ Although binding a buyer to confidentiality does nothing to change the ephemeral nature of a sales price, and therefore nothing to overcome the *per se* exclusion of ephemeral information from trade secrecy under Section 757, if that exclusion is held to have fallen away along with the UTSA's omission of the requirement of present continuous use, the existence of a confidentiality agreement becomes probative – potentially highly so – of the trade secret status of a price. Indeed, a Wisconsin court has held, misconstruing authority from Illinois and Pennsylvania, which distinguishes quite clearly between protected price-generative information and unprotected price-paid information, that the existence of a confidentiality agreement between a seller and its customers is a “special circumstance” that can bring actual prices charged for goods sold within the protection of the UTSA.⁹⁴

Absent the related requirements of continuous use and non-ephemerality, there is no doctrinal bar to including prices paid within the scope of trade secret protection, and the question of whether any particular price can be considered a trade secret is transformed from a question of law to be answered (in the negative) by the court into one of fact to be answered (unpredictably) by a jury. The nature of the information is no longer dispositive; only its confidential treatment and competitive value – both intensely fact-sensitive – matter. For proponents of trade secret sales prices, who have a strong interest in controlling price information in the hands of customers

⁹³ See *Cardiac Pacemakers*, 413 F. Supp. 2d at 1020 (quoting the confidentiality clause contained in Guidant's contracts); *Emergency Care Research Institute*, 2007 U.S. Dist. LEXIS 67658, at *6 (“Guidant...maintains that nearly all Guidant sales contracts include a confidentiality provision prohibiting its CRM customers from disclosing the terms of their respective contracts.”); see also *supra* note 22.

⁹⁴ See *Burbank Grease Svcs., LLC v. Sokolowski*, 693 N.W.2d 89, 97 (Wis. App. 2005). In holding that an actual price can be a trade secret if it is “based on complicated or unique formulas that the customer does not know about,” *id.* at 96, the court in *Burbank Grease* manifestly misconstrued the Pennsylvania and Illinois cases on which it relied. See *supra* text accompanying note 89. The rule in Pennsylvania and Illinois is that pricing *formulae* can be trade secrets, but the *actual prices* that result from the application of such *formulae* cannot. See *id.* The fact that a price is *derived from* “complicated or unique formulas” does not, under the rule in Pennsylvania and Illinois, make it any more eligible for trade secret protection than a price that is derived from a simple or common formula. Whereas *price-generative* information is protected under the Pennsylvania and Illinois rulings, *prices* are not.

to prevent price competition, legal claims that seek to leverage the unintended consequences of the UTSA's revision of the First Restatement could be regarded as a prudent investment in the prevention of price erosion.

It is neither legally nor logically necessary, however, for courts in UTSA jurisdictions to treat as a *fait accompli* the accidental evolution that has made trade secret claims for transaction-specific sales prices – excluded *per se* from the scope of common law trade secrecy – seem plausible. In deciding cases like *Guidant's*, courts may consider not only *that* the requirement of continuous use does not appear in the UTSA, but *why* it does not appear there. Bearing in mind that the express intention of the UTSA's drafters was merely to “codif[y] the basic principles of common law trade secret protection” and not to effect a dramatic expansion in the scope of trade secrecy, the definition of trade secret under the UTSA should be interpreted as coextensive with that under Section 757, except to the very limited extent that the drafters of the UTSA sought to modify the requirements of Section 757 to bring within the ambit of trade secrecy, in addition to information already in continuous use, information that has (or once appeared to have) the potential for such use. To read the UTSA's omission of the requirement of present continuous use as synonymous with an embrace of all forms and types of ephemeral business information is to read the statute as repealing rather than slightly modifying an essential element of the common law definition of trade secrets. Such a reading not only undermines the drafters' express intent, it transforms a legal regime grounded in the prevention of unfair competition between businesses into one that can be called upon to manipulate the balance of power between businesses and their customers in the marketplace for goods. The admitted reason for which device manufacturers are seeking trade secrecy for prices paid – to maintain bargaining leverage in relationships with

customers – is completely foreign to the policy goals underlying trade secrecy: encouraging innovation and promoting ethical business conduct between competitors.

The Device Market, the Escalating Cost of Health Care,
and the Push for Price Transparency

Illustrating why extending trade secret protection to prices paid for medical devices is unsound not only as a matter of intellectual property policy but also as a matter of health care policy requires some explanation of both the current state of healthcare spending in the United States and the economic context in which device manufacturers have historically operated. I begin with some statistics: Health care costs in the United States were \$2.3 trillion in 2007 – 16 percent of the gross domestic product (“GDP”).⁹⁵ They increased at two times the rate of inflation and are projected to consume 20 percent of GDP by 2016.⁹⁶ Since 2000, health insurance premiums for those insured through employment-based plans have increased 100 percent, measured against cumulative inflation of 24 percent and cumulative wage growth of 21 percent during the same period.⁹⁷ Implantable medical devices, including those dedicated to heart rhythm management, account for a significant share of our now prodigious annual national health care expenditure. For example, in 2003 alone approximately 125,000 defibrillators were implanted in the United States at a cost of some \$5 billion.⁹⁸ In comparative terms, this number

⁹⁵ National Coalition on Health Care (“NCHC”), *Facts on the Cost of Health Care*, at <http://www.nchc.org/facts/cost.shtml> (last visited June 2, 2008). By way of comparison to other developed countries, health care spending consumed 10.9 percent of the GDP in Switzerland, 10.7 percent in Germany, 9.7 percent in Canada and 9.5 percent in France, according to the Organization for Economic Cooperation and Development. *Id.*; see also Clark C. Havighurst, *Distributive Injustice(s) In American Health Care*, 69 LAW & CONTEMP. PROB. 7, 12 (2006) (citing a study estimating that healthcare expenditures were projected to reach \$2.16 trillion in 2006 – 16.5 percent of Gross Domestic Product).

⁹⁶ *Facts on the Cost of Health Care*, *supra* note 95.

⁹⁷ *Id.*

of implants corresponds to a rate per million patients that is 26 times that of Japan and 14 times that of France.⁹⁹ Indeed, the volume of interventional cardiology procedures in the United States far outstrips that of Japan, France, Germany, and the United Kingdom in every category from pacemakers and defibrillators to coronary stents.¹⁰⁰ The rise in these costly procedures is contributing to dramatic annual increases in the cost of health care. One study conducted in 2002 found that drugs and medical devices together accounted for 22% of healthcare insurance premium increases in the U.S. from 2001 to 2002.¹⁰¹

Today's very advanced and very expensive technology of heart rhythm management is the result of decades of investment, invention, and innovation by a small handful of manufacturers in collaboration with researchers and cardiologists.¹⁰² The pacemaker, which was introduced in 1952 as an external appliance the size of a toaster oven, has been transformed through the incorporation of microprocessors into a tiny implant about the size of a quarter that packs the processing power of a mainframe computer.¹⁰³ Both smaller and smarter than their predecessors, the newest generation of pacemakers and defibrillators is controlled by tiny computers that can sense and respond automatically to changes in heart rhythms.¹⁰⁴

The rapid pace of innovation in CRM technology and the ever-increasing sophistication of devices have come with a high price tag. The average price of a pacemaker, the least

⁹⁸ See Kruger, *supra* note 7, at 283.

⁹⁹ *Id.* at 284.

¹⁰⁰ *Id.*

¹⁰¹ See Havighurst, *supra* note 95, at 19 n.30 (citing a 2002 study by PriceWaterhouseCoopers).

¹⁰² See KIRK, *supra* note 8, at 4-5.

¹⁰³ See *id.*

¹⁰⁴ See *id.* at 298.

expensive class of devices, is about \$5,000.¹⁰⁵ Conventional implantable defibrillators cost \$22,000 on average.¹⁰⁶ At the high end of the scale, CRT-Ds, the defibrillator-like devices used to treat congestive heart failure, are priced between \$30,000 and \$35,000 apiece.¹⁰⁷ These prices reflect only the cost of the devices themselves and do not include the costs associated with implanting them, such as paying doctors and other hospital staff, booking procedure rooms, and paying for post-procedure care and monitoring.

Given the high price of devices and the increasing number of implants, it should come as no surprise that the business of cardiac rhythm management has been booming. Revenues in the United States for device manufacturers in 2003 were \$3.1 billion for pacemakers, \$2.5 billion for defibrillators, and \$1.6 billion for CRT-Ds.¹⁰⁸ And while it is true, as corporations are wont to say in their investment prospectuses, that past performance is no guarantee of future profits, device manufacturers and those who invest in them have a number of reasons to remain bullish.¹⁰⁹ Among these reasons are an aging population, the continued prevalence of heart and coronary artery disease, and the fact that modern medical practice in the United States has an almost limitless capacity to assimilate new technologies.¹¹⁰

One of the main reasons that CRM device manufacturers have fared so well economically is that price competition in the market for implantable medical devices has historically been

¹⁰⁵ Kruger, *supra* note 7, at 308. The average per capita health insurance expenditure in the United States in for the year 2007 was \$7,600. See *Facts on the Cost of Healthcare*, *supra* note 94.

¹⁰⁶ Kruger, *supra* note 7, at 308.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ See *id.* at 285 (marveling that the medical technology field is “largely free” of the laws of supply and demand, “because the demand for medical technology is exceedingly inelastic...or is simply not subject to these principles”).

¹¹⁰ *Id.*

virtually non-existent.¹¹¹ This is because medical devices belong to a category of specialty goods known as physician preference items (“PPIs”). PPIs alone can account for as much as 60 percent of a hospital’s annual supply expenditure.¹¹² Statistics from one New York health system revealed that although PPIs constituted only 3 percent of supply purchases, they consumed 40 percent of the system’s total supply spending and had increased in price annually by 8 to 15 percent during the period covered by the study.¹¹³

PPIs are, as their name indicates, chosen by physicians, who receive specialized training from device manufacturers and who tend, as a result of this training and intense cultivation by sales representatives, to be loyal to a particular manufacturer to the exclusion of others.¹¹⁴ When a device manufacturer’s sales representatives pitch new devices to an implanting physician, they sell on technology and features, not on price.¹¹⁵ The traditional purchasing model has been for the physician to choose the device, heedless of cost, and for the hospital to pay for it, also heedless of cost.¹¹⁶ With price considerations altogether removed from the equation, the physician tends to choose the latest offering from his or her preferred manufacturer, regardless of

¹¹¹ See *id.* at 308 (“Several factors contribute to positive pricing trends. For one, products are not selected on the basis of price... Because of this, companies do not tend to compete on price.”).

¹¹² Kathleen Montgomery & Eugene S. Schneller, *Hospitals’ Strategies for Orchestrating Selection of Physician Preference Items*, 85 THE MILBANK QUARTERLY 307, 308 (2007).

¹¹³ Paula DeJohn, *Seeing Is Believing: Materials Stance on Price Transparency*, MATERIALS MANAGEMENT IN HEALTHCARE, Feb. 2008, at 27.

¹¹⁴ See Burnett, *supra* note 19, at 41 (stating that “physician preference generally trumps all other considerations when it comes to device selection” and that “physician training in specific vendor products, working relationships and clinical expertise of vendor representatives and a physician’s history with particular devices further confound a hospital’s ability” to negotiate aggressively with vendors).

¹¹⁵ See Montgomery & Schneller, *supra* note 112, at 308 (stating that “[s]urgeons’ decisions [about which device to use] are frequently based on factors not related to cost”).

¹¹⁶ See Kruger, *supra* note 7, at 285 (observing that “the principal decision maker, the cardiologist, does not pay for the procedure and in many cases has virtually no comprehension of the product costs involved”).

the potential availability of less costly alternatives.¹¹⁷ It is not difficult to see how this model, which altogether divorces the hospital's cost considerations from the physician's choice, has operated to keep devices prices high.¹¹⁸

The traditional PPI purchasing model has been under threat in recent years, however, as hospital administrators have attempted to control rising implant costs by seeking to align the choices of their physicians with institutional efforts to manage inventories more efficiently and to negotiate vendor contracts more aggressively. The Medical Payment Advisory Commission (MedPAC), created to advise Congress on issues impacting Medicare, has recommended that hospitals work collaboratively with their physicians to standardize their use of medical devices and to press for larger discounts from device manufacturers.¹¹⁹ This advice was doubtless prompted in part by a 40 percent increase (from \$10 to \$14 billion) between 2003 and 2005 in Medicare's total payment to hospitals for implant procedures.¹²⁰

Alternative purchasing models are thus increasingly being explored and adopted by hospitals across the country to replace the traditional competitive bidding process, in which one or two "preferred" manufacturers, to the exclusion of their competitors, are given substantial

¹¹⁷ KIRK, *supra* note 8, at 276, explains how device manufacturers have successfully used the constant introduction of new technology to avoid cutting prices:

In the rhythm-management industry, manufacturers have fought for market share not by cutting prices but by investing heavily in new products and promoting them heavily. Hospitals wanted price concessions and did get some, but each pacemaker/ICD manufacturer sought to differentiate its products and to hold the line on prices by adding new features. It had become gospel in all the companies by 1980 that, at least in the U.S. market, failure to "improve the product" continually would ruin a firm's pricing strategy, undermine its reputation, and erode its market share.

¹¹⁸ See Montgomery & Schneller, *supra* note 112, at 308 (pointing out the existence of "a disconnect between the hospital's cost containment goals and physicians' preferences"); see also Kruger, *supra* note 7, at 287 ("Companies that market products on a performance basis, unshackled from cost-based pricing, can enjoy high gross margins and above-average profits.")

¹¹⁹ Montgomery & Schneller, *supra* note 112, at 310.

¹²⁰ *Id.* at 309-310. These numbers also include orthopedic (e.g., hip and knee) implants. *Id.*

market share guarantees – sometimes as much as 90 percent for a single device type – in return for price discounts over the course of a fixed contract term.¹²¹ The greater the market share promised, in general, the greater the discount or rebate on price. This so-called preferred vendor model, in which one or two of the three major CRM device manufacturers are effectively locked out during the contract period, is being supplanted by so-called price-to-play arrangements, in which the hospital sets a “shelf price” (i.e., a price ceiling) for a particular device and challenges all manufacturers to meet or beat that price as a precondition for doing business at the hospital.¹²² Volume commitments to particular vendors are eschewed, and the shelf price is determined by a hospital committee comprised of administrators and physicians based on a weighted average of the hospital’s device costs for the preceding year and “benchmarking to assess best prices achieved at other like institutions.”¹²³

The practice of benchmarking, which Guidant contentiously characterized in its counterclaim against ECRI as “trafficking...confidential CRM pricing,”¹²⁴ functions to increase price transparency in the device market by increasing the amount of price information available to hospital buyers. Increased price transparency in the market for medical services has been a core component of the Bush administration’s push for consumer-directed health care, a model

¹²¹ See, e.g., Keast, *et al.*, *supra* note 18, at 12-15 (describing the nature and results of a new approach to contracting for CRM devices that was adopted by the University of Michigan Health System in 2003). Montgomery and Schneller, *supra* note 112, describe a reverse auction model, “in which prequalified vendors are offered a short time to bid on a carefully defined product, with committed volumes going to multiple low bidders.” *Id.* at 318.

¹²² Keast, *et al.*, *supra* note 18, at 12.

¹²³ *Id.* at 13. In 2001, the University of Utah Hospitals and Clinics (“UUHC”) embarked on a five-year performance improvement initiative designed to gain control of costs in the supply chain. See Jonathan J. Clark, *Eyes on the Supplies: Results of a Massive Performance Improvement Initiative*, HEALTHCARE FINANCIAL MANAGEMENT, April 2006, at 74-82. In the final phase of the initiative, the organization made a priority of “renegotiating contracts with manufacturers based on benchmarking analyses.” *Id.* at 79. Administrators relied on benchmarking “to identify opportunities for quick, significant, and sustainable savings in the procurement area that are achievable through product selection changes and contract renegotiations.” *Id.* at 82.

¹²⁴ First Amended Answer and Counterclaims of Defendants, at 9.

designed to increase the price sensitivity of patients through high-deductible health plans that shift responsibility for payment from insurers to patients, thus giving patients both a need to know and a reason to care *ex ante* how much the medical services they receive actually cost.¹²⁵

A report by the Congressional Research Service (“CRS”) prepared for members of Congress in 2007 offers the following explanation of the role of transparent prices in the operation of an efficient market:

Transparent prices play a key role in the efficient allocation of goods and services... Financial economics researchers typically define markets as efficient when prices reflect all available information and when prices adjust swiftly as new information arrives. If buyers and sellers do not know what prices are, then some mutually agreeable trades will fail to occur, thus creating inefficiencies. If buyers can see and compare prices for the same good offered by different sellers, the buyers then save money by choosing the cheapest vendor. If goods are similar but not identical, buyers then can compare prices and qualities offered by different sellers and pick whichever offer suits them best. The buyers’ ability to choose an offer that suits them best puts tremendous pressure on all sellers to lower prices, improve quality, or both. Without such competitive pressure firms that are less efficient or that are earning excess profits can remain in the market, and prices will be higher than they would otherwise be.¹²⁶

Price transparency also facilitates what economists call “yardstick competition,” a way for buyers to compare not only the different prices offered to them by competing sellers for the same or similar products, but the different prices offered to other buyers for those products.¹²⁷

¹²⁵ In 2006, President George W. Bush issued an executive order requiring federal agencies responsible for the administration of health care programs, including Medicare, to disclose to program beneficiaries the prices the agencies pay participating providers for procedures and to participate in the development of information about overall costs of services for common episodes of care and the treatment of common chronic diseases. See Exec. Order No. 13,410, 71 Fed. Reg. 51,089 (Aug. 22, 2006). For more information on the push for consumer-directed healthcare and prospects for its success in the current information and payment environment, see Paul B. Ginsburg, *Shopping for Price in Medical Care*, 26 HEALTH AFFAIRS WEB EXCLUSIVE w208 (2007); Uwe W. Reinhardt, *The Pricing of U.S. Hospital Services: Chaos Behind a Veil of Secrecy*, 25 HEALTH AFFAIRS 57 (2006).

¹²⁶ D. Andrew Austin & Jane G. Gravelle, *Does Price Transparency Improve Market Efficiency: Implications of Empirical Evidence in Other Markets for the Health Sector*, Cong. Research Serv. Report No. RL34101, July 24, 2007, at 4.

¹²⁷ See Margaret K. Kyle & David B. Ridley, *Would Greater Transparency and Uniformity of Health Care Prices Benefit Poor Patients?*, 26 HEALTH AFFAIRS 1384,1385 (2007) (defining “yardstick competition”).

Yardstick competition is both the type of competition that device manufacturers like Guidant are seeking to prevent through trade secret pricing and the type of competition that materials managers, the hospital administrators in charge of procurement, are seeking to enhance through benchmarking.

When discussing the effects of increased price transparency in the market for medical devices, it is important to acknowledge and reckon with the significant ways in which the health care market as a whole differs from, and therefore may behave unlike, markets for standardized commodities.¹²⁸

Several aspects of health markets, including natural differentials in the product due to differences in quality and patient characteristics and the widespread practice of price discrimination, limit the effects of price transparency. In addition, other important characteristics interfere with price signals and competitive pricing outcomes: the product is complicated, physicians rather than consumers tend to determine the product purchased, patients generally do not directly pick hospitals, many costs are covered by third parties, and patients have poor information about costs.¹²⁹

As a result of these distinctive characteristics, “prices as signals are diluted and muted in the health care market as compared to many other markets,” a phenomenon which suggests that “improvements in price transparency may be less effective in the health care market than in other markets.”¹³⁰ Improvements in price transparency also create the potential for collusion in oligopolistic markets like the device market, to the extent that more transparent prices make cartels easier to enforce.¹³¹ Collusion is far from a foregone conclusion, however, as the harm to

¹²⁸ See Austin & Gravelle, *supra* note 126, at 4.

¹²⁹ *Id.* at 12.

¹³⁰ *Id.*

¹³¹ Kyle & Ridley, *supra* note 127, at 1388.

competition caused by giving competitors better price information must be weighed against the enhancement to competition caused by putting the same information into the hands of buyers.¹³²

Notwithstanding the complicated nature of the market for healthcare, most empirical research on price transparency in other markets suggests that better price information leads in the aggregate to lower, more uniform prices.¹³³ Not all buyers, of course, stand to benefit from a trend toward more uniform prices in a market characterized, as the device market is, by price discrimination. Buyers for which uniform prices are lower than the prices they pay under a regime of price discrimination stand to benefit, whereas buyers for which uniform prices are higher stand to lose.¹³⁴ From a policy perspective, though, it is the aggregate, market-wide effect of increased price transparency rather than the effect on individual hospital buyers that is meaningful. As for the effect on individual hospitals, many materials managers feel quite strongly that the information deficit created by trade secrecy for device prices would undermine their efforts, encouraged by MedPAC and necessitated by already narrow margins on implant procedures, to contain rising device costs.¹³⁵

Given that price benchmarking is being used increasingly by hospitals as a tool for cost-management and a mechanism for shifting leverage in contract negotiations, it should not be surprising that Guidant has moved to include and enforce strict confidentiality provisions in its device contracts. Nor should it be surprising that Guidant has mobilized its lawyers to find a

¹³² Austin & Gravelle, *supra* note 126, at 39.

¹³³ *Id.* at 46.

¹³⁴ Kyle & Ridley, *supra* note 127, at 1385.

¹³⁵ See, e.g., Mantone, *supra* note 18, at 18 (stating that the Aspen and ECRI lawsuits “are drawing attention from hospital materials managers, who worry the outcomes could restrict hospitals from sharing supply prices with any third party, even affiliated ones”); DeJohn, *supra* note 113, at 27 (quoting a materials manager who views Aspen’s settlement with Guidant as a “red flag” to hospitals that rely on benchmarking).

means by which it might effectively stop third parties like Aspen and ECRI from using or disseminating price information obtained when hospitals, acting out of self-interest, elect to breach their promises of confidentiality. What hospital buyers stand to discover through benchmarking, and what device manufacturers would rather they not know, is not so much that price discrimination exists in the market for medical devices. That's not news. The news is the extent of the price discrimination – the fact that the gap between the prices two hospitals pay for the same device can amount to a chasm. A recent survey of a hundred hospitals revealed that prices to different hospitals for the same orthopedic device ranged from \$2,000 to \$9,000 – a striking differential by any measure.¹³⁶ Such price differentials are not always explained, as one might suspect they would be, by differences in purchase volume or hospital size. A ten-hospital health system based in Illinois discovered as the result of an internal survey that the hospitals in the system with the highest procedure volume were actually those paying the highest prices for PPIs.¹³⁷ By intervening legally to limit the flow of price information to hospital purchasing agents experimenting with new sources of leverage and ways to bargain, Guidant has made an indirect play to quash the emerging redistribution of power in the PPI contracting process.

The economic motivation for Guidant's legal campaign to propertize – and thereby control – information about the prices hospitals pay for devices is not difficult to discern from the predictions of some health care economists and other industry watchers, who see the enormous financial success of device manufacturers over the last two decades as being unsustainable in the long run. Health care economist Lawton R. Burns attributes the delayed development of price pressure in the device market to the fact that “the cost of devices is often

¹³⁶ Montgomery & Schneller, *supra* note 112, at 310.

¹³⁷ DeJohn, *supra* note 113, at 25.

submerged in payments to hospitals.”¹³⁸ Burns warns that “[m]anufacturers should expect greater payer scrutiny of the prices for their products...as the technologies diffuse to the wider population and as reports surface about their actual cost.”¹³⁹ Science historian Jeffrey Kirk sounds a similar note:

Eventually the pacemaker, once a glamour product, will become a commodity: all brands will offer essentially identical features, all secrets of design and production will stand revealed. Prices will plummet. Of course, the manufacturers strive to postpone that day, and thus far they have succeeded handily.¹⁴⁰

The latest phase in succeeding handily has been resisting the trend toward commodity pricing through the assertion of legal claims for trade secret prices – a way to keep the actual price of devices, and the sometimes profound extent to which those prices can vary from one buyer to the next, obscure. In pressing the cases against Aspen and ECRI, Guidant may be acting as the *de facto* standard bearer for the device industry as a whole.¹⁴¹ With both suits privately settled and the legal status under the UTSA of actual prices paid for devices publicly *unsettled*, Guidant and its competitors may now be benefiting from a litigation-induced chilling effect on both formal and informal benchmarking practices. To the extent that this is true, the industry may be winning the war against price disclosure, even though Guidant did not score decisive wins in either of its court battles.

The publicity generated by the Guidant litigation may ultimately prove, however, to be a double-edged sword for manufacturers. Given the level of scrutiny the trade press has trained on

¹³⁸ Lawton R. Burns & Stephen M. Sammut, *Healthcare Innovation across Sectors: Convergences and Divergences*, in *THE BUSINESS OF HEALTHCARE INNOVATION* 286 (Lawton R. Burns, ed., 2005), at 361.

¹³⁹ *Id.*

¹⁴⁰ KIRK, *supra* note 8, at 10.

¹⁴¹ Guidant alleged in its Answer to ECRI’s complaint that “CRM pricing confidentiality is standard throughout the CRM industry, and that Medtronic and St. Jude [, the two other major U.S. CRM device manufacturers,] include similar confidentiality provisions in their contracts with customers.” First Amended Ans. & Counterclaims at 1-2.

the Aspen and ECRI cases, hospital administrators are now on notice of a fundamental tension between the alternative purchasing models they have embraced, which rely on yardstick competition, and the broad promises of confidentiality that they and their peers have been making in their contracts with device manufacturers.¹⁴² The author of a recent article in the trade magazine *Materials Management in Healthcare* offered the following advice to readers:

To counteract this trend [toward price secrecy], materials managers will have to work together. Sources agree that they should continue to push back by obtaining legal department backing to overturn confidentiality clauses.¹⁴³

While it is unclear on what legal grounds confidentiality provisions in existing device contracts could be overturned, such provisions are open to renegotiation when the contracts in which they appear expire, and some hospital executives have openly committed to taking a harder line with respect to manufacturers' demands for confidentiality.¹⁴⁴ If hospital buyers in large numbers

¹⁴² See, e.g., DeJohn, *supra* note 113, at 24 (“With vendors increasingly resisting sharing price data, hospitals face a dilemma: They are caught between legal obligations that come with the contracts they sign and demands by hospital administrators and patients to keep costs down.”)

¹⁴³ *Id.* at 26.

¹⁴⁴ A senior hospital executive, asked at a roundtable discussion about overcoming barriers to communication between hospitals and patients, cited confidentiality clauses in vendor agreements as a problem that needs to be addressed:

In some of the contracts we have with suppliers, there are confidentiality clauses that limit our ability to communicate the cost of certain types of devices. In the past couple of years, a lawsuit was filed by a device company in relation to the confidentiality clauses. A ruling upheld the secrecy of information, such that we are prohibited from telling a patient the price paid for supplies. We are trying to overcome this situation by making sure that we don't have these confidentiality clauses in our contracts, or, if there is a confidentiality clause, that it allows us to release the information to patients and other necessary business partners.

Executive Roundtable, *Provider Views – and Strategies – for Price Transparency*, HFMA (Healthcare Fin. Mgmt. Ass'n), May 2007, at 2.

In the same vein, the director of materials management at an Indiana-based health system had the following to say about non-disclosure provisions presented by manufacturers during contract negotiations:

I have always had a problem in signing a non-disclosure statement...I would now resist more vehemently on the basis of the goal of the government to make healthcare costs more transparent... Another thought being conveyed to several GPO [group purchasing organization] memberships is that we should retain the right to share pricing information with anyone with

successfully resist these demands during contract negotiations, the factual basis for manufacturers' claims that device prices are trade secrets will erode. Secrecy-in-fact is, after all, the *sine qua non* of any viable trade secret claim, under both the common law and the UTSA. And if the economic predictions of industry watchers are correct, the price pressure that device manufacturers have so far been successful in avoiding will finally be brought to bear as hospitals rely increasingly on benchmarking to learn what other buyers in the marketplace are actually paying. The existence of extremely divergent prices for the same device is a sign that consumers in the device market are poorly informed.¹⁴⁵ It is hard to imagine that any hospital administrator would agree to pay \$9000 for a device he or she affirmatively knows another hospital is getting for \$2000. While there is some risk that the lower profits caused by downward price pressure will lead to decreased incentives for manufacturers to invest in further research and development,¹⁴⁶ the greater social risk may be that the national health care system will soon collapse under the weight of uncontrollably rising costs.¹⁴⁷

whom we have a formal relationship. This would include other hospitals within the system, physicians, GPOs, consultants, advisors, alliances and any other third-party entities...I believe we have substantial reasons and support for not signing non-disclosure statements.

Rick Dana Barlow, *Inking the Ultimate RFP: To Overcome Legalese Hurdles, Simply Be Realistic and Expose the Fine Print*, HEALTHCARE PURCHASING NEWS, July 2006, at 10-11.

¹⁴⁵ Austin & Greville, *supra* note 126, at 12 (“If consumers are poorly informed, or hindered from taking their most advantageous option, prices might not converge to efficient levels, if they converge at all.”).

¹⁴⁶ See Kyle & Ridley, *supra* note 127, at 1385 (“If uniform pricing reduces firms’ profits, it reduces their incentives to invest in risky R&D projects. At the margin, some projects whose social benefits justify the costs of development will not be undertaken”).

¹⁴⁷ The number of uninsured Americans is steadily increasing: 47 million people were uninsured in 2006, an increase of 8.6 million—more than 18% —since 2000. An estimated 16 million Americans are classified as underinsured and are paying high out-of-pocket costs for care. The Commonwealth Fund, *Health Policy Reform: Beyond the 2008 Elections*, THE COLUMBIA JOURNALISM REVIEW, March/Apr. 2008 Supp., at 1. There are predictions that the “steady erosion of coverage brought on by monotonically decreasing affordability” will lead to 56 million uninsured by 2013. Paul Hughes-Cromwick, *et al.*, *Consumer-Driven Healthcare: Information, Incentives, Enrollment, and Implications for National Health Expenditures*, BUSINESS ECONOMICS, Apr. 2007, at 44. According to a report recently issued by the Bush administration, Medicare’s hospital insurance trust fund will become insolvent in 2019 and will pay more in benefits than it receives in taxes and other dedicated revenue sources

A second effect of the publicity surrounding the Guidant litigation was the introduction in the U.S. Senate of the Transparency in Medical Device Pricing Act of 2007 (“TMDPA”), a proposed amendment to the Social Security Act.¹⁴⁸ The bill, which is co-sponsored by Senator Arlen Specter of Pennsylvania and Senator Charles Grassley of Iowa, requires device manufacturers, as a condition of receiving payment from Medicare, Medicaid, and SCHIP, to submit to the Secretary of Health and Human Services, for publication on the web site of the Centers for Medicare and Medicaid Services, quarterly data on average and median sales prices for all implantable medical devices.¹⁴⁹ In their floor statements, Senators Specter and Grassley presented the TMDPA as a legislative solution to the problem of price secrecy and a policy intervention on behalf of hospitals and patients.¹⁵⁰ Senator Grassley asserted that passage of the bill “would go a long way toward ensuring that free market forces actually work” in the device market – a market in which “hospitals are at the mercy of medical device makers who have the upper hand.”¹⁵¹

In reality, the bill in its current form falls far short of the goal of bringing true price transparency to the market for medical devices. If it is enacted, it will require manufacturers to give less detailed price information to the government than subscriber hospitals were submitting to ECRI’s online database at the time the Guidant litigation was initiated. In its online database, ECRI published low prices in addition to average prices by model for Guidant CRM devices,

in 2008. Robert Pear, *Outlook Remains Bleak for Two Programs*, N.Y. TIMES, March 26, 2008, at <http://www.nytimes.com/2008/03/26/us/26benefit.html>. The question now may not be whether, but rather how and when, the system as it is currently structured will collapse. Hughes-Cromwick, et al., *supra*, at 44.

¹⁴⁸ See S. 2221, 110th Congr. (2007).

¹⁴⁹ See *id.*

¹⁵⁰ See Press Release, Office of Sen. Charles Grassley (Oct. 23, 2007) (*at* http://grassley.senate.gov/public/index.cfm?FuseAction=PressReleases.Detail&PressRelease_id=ce9ec99a-1321-0e36-ba48-fb44aebca994).

¹⁵¹ *Id.*

thereby allowing hospitals to “find the floor” of the market for any given device – to see the price paid by the toughest bargainer with the most negotiating power. ECRI also reported prices paid by its subscribers on both a regional and a national basis, thereby allowing hospitals to account for geographical price variations. With access to only national median and average prices, which is all the TMDPA requires, hospitals would be unable to determine either the range of prices charged for a particular device or the low price charged, and they would have no comparative information of any kind with respect to regional prices.

In addition to the fact that its disclosure requirements are strikingly modest, the TMDPA contains a vague exemption, pursuant to which “certain sales may be excluded in the case where the Secretary determines such exclusion is appropriate.” The bill is silent as to what types of sales might qualify for exclusion, how such exclusions would be sought by manufacturers, and how determinations would be made at the agency level concerning the appropriateness of the exclusions sought. If the legislation is enacted, to the extent that the median and average device prices published by the government will not, in fact, reflect all sales, the information will be less accurate and therefore that much less informative.

The timidity of the TMDPA may be intended to avoid a challenge by manufacturers that price disclosure requirements constitute a regulatory taking of trade secrets. But even if manufacturers like Guidant could establish the trade secret status under state law of the actual prices hospitals pay for devices, which they have not yet done in any jurisdiction, the Supreme Court’s ruling in *Ruckelshaus v. Monsanto*¹⁵² strongly suggests that legislation containing more granular price disclosure requirements than those in the TMDPA would survive judicial scrutiny. In *Ruckelshaus*, the Court rejected a Fifth Amendment challenge by a pesticide manufacturer to

¹⁵² 476 U.S. 986 (1984).

amended provisions in the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”) that require manufacturers seeking government registration of pesticides to disclose to the EPA health, safety, and environmental data, which the statute, in turn, authorizes the EPA to disclose to the public under certain circumstances.¹⁵³ Specifically, public disclosure is permitted if the Administrator of the EPA determines that it is “necessary in the public’s interest,”¹⁵⁴ notwithstanding an express provision in the statute barring the disclosure of trade secrets.¹⁵⁵

The Court in *Ruckelshaus* agreed with the trial court that, to the extent the data at issue were protected under state trade secret law, Monsanto had a cognizable Fifth Amendment property interest in them.¹⁵⁶ The Court disagreed with the trial court, however, that the EPA’s public disclosure of the data as permitted by the statute would constitute a taking. It held that “as long as Monsanto is aware of the conditions under which the data are submitted, and the conditions are rationally related to a legitimate Government interest, a voluntary submission of data by an applicant in exchange for the economic advantages of a registration can hardly be called a taking.”¹⁵⁷ As the Court saw it, the decision whether the economic value of obtaining registration was greater to Monsanto than the cost of having its data disclosed in the public’s interest was Monsanto’s to make.¹⁵⁸ Because the government offered something of value to applicants (i.e., registration and the concomitant right to sell in the U.S. market) in return for the potential public disclosure of their proprietary data, there was no uncompensated taking. If

¹⁵³ See *id.* at 990, 1008.

¹⁵⁴ *Id.* at 990.

¹⁵⁵ *Id.* at 996-97.

¹⁵⁶ *Id.* at 1004.

¹⁵⁷ *Ruckelshaus*, 476 U.S. at 1007.

¹⁵⁸ *Id.* at n.11.

Monsanto valued the benefits of secrecy more highly than those of registration, it was free to opt out of the U.S. market and focus on international sales.

The Court's reasoning in *Ruckelshaus* would seem to apply straightforwardly to legislation requiring a device manufacturer to disclose its allegedly trade secret prices to the government, for subsequent disclosure to the public, in exchange for the right to participate in and receive reimbursement from government-sponsored health programs. Assuming for the sake of argument that the prices paid for devices can be trade secrets, a statute requiring their disclosure would not run afoul of the Fifth Amendment as long as it (1) gives manufacturers notice that the reported data are subject to public disclosure in the interest of promoting the public's interest (e.g., in affordable health care) and (2) offers manufacturers something of value in return for their disclosures (e.g., the advantage of participating in government health care programs like Medicare and Medicaid). A statute offering the benefit of government reimbursement for devices in exchange for public disclosure of the actual prices charged for those devices would present device manufacturers with a legitimate value proposition closely analogous to the one presented to pesticide manufacturers by FIFRA. There would be no uncompensated taking.

If the TMDPA were amended to require more comprehensive and informative price disclosures than it currently does, and to eliminate the vague exemption for "certain sales," it would genuinely advance the cause of price transparency in the health care market. In its current form, however, the bill fails even to preserve the informational *status quo* that existed when ECRI sought a declaratory judgment that it was not misappropriating Guidant's trade secrets by publishing price information submitted to its online database by subscribing hospitals.

Conclusion

Confronted with the development of unprecedented price pressure in the market for surgical implants, the Guidant Corporation has taken the lead among device manufacturers in asserting trade secrecy for sales prices. Its admitted motivation for doing so is not to prevent such information from falling into the hands of competitors, which is the traditional concern in trade secrets cases, but to prevent customers from accessing comparative price information that could increase their leverage in contract negotiations. As yet, there has been no determination by any court that the actual prices hospitals pay for CRM devices are trade secrets under the UTSA, but neither has there been any contrary determination. Given the unsettled state of the law in this area and Guidant's demonstrated willingness to sue information providers, price opacity will likely reign in the market for medical devices unless hospitals in significant numbers begin to resist manufacturer demands of price confidentiality in the contracting process. Even if such resistance fails, however, courts presented in the future with "prices paid" trade secret claims under the UTSA – for medical device prices or, for that matter, for any sales prices – have a legitimate doctrinal basis for deciding that such claims are foreclosed a matter of law, because transaction-specific sales price information does not fall within the very narrowly expanded definition of trade secrets that was adopted by the architects of the UTSA when they set out to codify the existing common law.

Although the TMDPA has been offered as a legislative solution to the problem of price opacity in the medical device market, the bill in its current form would do little to increase price transparency, because it requires manufacturers to disclose only median and average national sales prices for each device. A more aggressively drafted bill that conditions governmental reimbursement for implants on the manufacturer's disclosure to HHS, for subsequent disclosure

to the public, of the full range of prices charged to hospitals would go much further than the TMDPA to promote real price transparency. Such legislation, if challenged by device manufacturers as an unconstitutional taking, would likely survive scrutiny in light of the Supreme Court's ruling in *Ruckelshaus*.

While it is true that economists disagree about the probable effects of increased price transparency in the very complex market for health care, there is good evidence to suggest that putting accurate, comprehensible information about quality and price into the hands of consumers – be they hospitals or patients – is a necessary step toward improving the overall efficiency of the health care system. Considered from this perspective, trade secret prices are no more justifiable as a matter of health policy than they are as a matter of intellectual property policy.